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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,636	04/19/2000	Shyh-Mei Ho	ST9-99-145	3553

36491 7590 01/13/2004

KUNZLER & ASSOCIATES
8 EAST BROADWAY
SALT LAKE CITY, UT 84111

EXAMINER	
HILLERY, NATHAN	
ART UNIT	**PAPER NUMBER**
2176	

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/552,636	HO ET AL.	
	Examiner	Art Unit	
	Nathan Hillery	2176	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 April 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is responsive to communications: Change of Address filed on 4/18/03.

2. Claims 1 – 21 are pending in the case. Claims 1, 8, and 15 are independent.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because undue length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1 – 3, 7, 8 – 10, 14, 15 – 17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins et al. (US006532463B1) and further in view of IBM (Research Disclosure 423111) and Meltzer et al. (US006125391A).

7. **Regarding independent claim 1**, Robbins et al. teach that *the present invention uses a Web control program that can generate Web pages in response to requests by users at computers 10. The Web control program runs on the mainframe 16 and generates the HTML needed to display particular data as part of a Web page. The Web access program on computer 16 additionally may, in response to a request for data that is not stored on mainframe computer 16, send a request for the data to another mainframe 18, receive the requested data back, put it into Web format (i.e., mark it up into HTML), and supply the Web page to the user* (Column 5, lines 16 – 26) and IBM teaches that *the text transformation Engine consists of … Translation Engine which converts HTML to XML …* (page 2, lines 2 – 3). It would have been obvious to the skilled artisan to interpret the combined disclosures of Robbins et al. and that of IBM as providing for **receiving a document comprising an IMS transaction definition encoded in XML and providing the decoded IMS transaction definition to the IMS**, since *there is a CICS-based HTML generator that allows interactive creation of Web pages that can manipulate mainframe databases by reading, browsing, and updating VSAM and DB2. This one module can manage any number of different files, including fixed-length and segmented VSAM files, as well as DB2 databases. This program uses CICS-created objects for HTML generation including (but not limited to) file definitions, page definitions, drop-down lists, and Web page text* (Column 5, lines 57 – 65) and

since IBM teaches that *the translation of HTML to well formed XML documents with expanded tags is desirable for several reasons* (page 2, second paragraph). It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Robbins et al. with that of IBM because such a combination would offer the users of Robbins et al. the benefit of *a resulting document optimized for the client device, network link, and browser* (page 2, lines 5 – 6). Neither Robbins et al. nor IBM explicitly teach **obtaining a DTD ... and parsing the XML document using the DTD....** Meltzer et al. teach that *FIG. 4 illustrates a process of receiving and processing an incoming document for the system of FIG. 3. Thus, the process begins by receiving a document at the network interface (step 400). The parser identifies the document type (401) in response to the business interface definition. Using the business interface definition, which stores a DTD for the document in the XML format, the document is parsed (step 402). Next, the elements and attributes of the document are translated into the format of the host (step 403)* (Column 26, lines 19 – 27), which provides for **obtaining a DTD specifying rules for decoding the IMS transaction definition, parsing the XML document using the DTD to decode the IMS transaction definition**. It would have been obvious to one with ordinary skill in the art to combine the inventions of Robbins et al. and IBM with that of Meltzer et al. because such a combination would offer the users of Robbins et al. and IBM *an infrastructure for connecting businesses with customers, suppliers and trading partners ... using self-defining, machine-readable documents* (Column 2, lines 32 – 36).

8. **Regarding dependent claims 2 and 3**, Robbins et al. teach that *these object modules have the ability to read, browse, and update mainframe databases including VSAM (a specific brand name of indexed file structure) and DB2. (a specific database). Programs can be written and executed in any CICS-supported language without using any of the EAGLE development tools* (Column 6, lines 8 – 14). It would have been obvious to one of ordinary skill in the art at the time of the invention to interpret the disclosure as providing the capabilities so that **the IMS transaction definition comprises an APPLCTN macro nor a TRANSACT macro**, since it would have been obvious to one with ordinary skill in the art to know that if one macro is successfully sent then any macro can be successfully sent, since a macro is simply a series of instructions.

9. **Regarding dependent claim 7**, Robbins et al. teach that *the present invention uses a Web control program that can generate Web pages in response to requests by users at computers 10. The Web control program runs on the mainframe 16 and generates the HTML needed to display particular data as part of a Web page. The Web access program on computer 16 additionally may, in response to a request for data that is not stored on mainframe computer 16, send a request for the data to another mainframe 18, receive the requested data back, put it into Web format (i.e., mark it up into HTML), and supply the Web page to the user* (Column 5, lines 16 – 26) and IBM teaches that *the text transformation Engine consists of … Translation Engine which converts HTML to XML …* (page 2, lines 2 – 3). It would have been obvious to the skilled artisan to interpret the combined disclosures of Robbins et al. and that of IBM as

providing for **obtaining an IMS transaction definition, obtaining a DTD... , and parsing the IMS transaction definition ...**, since *there is a CICS-based HTML generator that allows interactive creation of Web pages that can manipulate mainframe databases by reading, browsing, and updating VSAM and DB2. This one module can manage any number of different files, including fixed-length and segmented VSAM files, as well as DB2 databases. This program uses CICS-created objects for HTML generation including (but not limited to) file definitions, page definitions, drop-down lists, and Web page text* (Column 5, lines 57 – 65) and since IBM teaches that *the translation of HTML to well formed XML documents with expanded tags is desirable for several reasons* (page 2, second paragraph). It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Robbins et al. with that of IBM because such a combination would offer the users of Robbins et al. the benefit of *a resulting document optimized for the client device, network link, and browser* (page 2, lines 5 – 6).

10. **Regarding independent claim 8**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

11. **Regarding dependent claim 9**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

12. **Regarding dependent claim 10**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

13. **Regarding dependent claim 14**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

14. **Regarding independent claim 15**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

15. **Regarding dependent claim 16**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

16. **Regarding dependent claim 17**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

17. **Regarding dependent claim 21**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

18. Claims 4, 6, 11, 13, 18, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins et al. (US006532463B1), IBM (Research Disclosure 423111) and Meltzer et al. (US006125391A) as applied to claims 1 – 3, 7, 8 – 10, 14, 15 – 17, and 21 above, and further in view of Iyengar et al. (US006038393A) and Brodsky (XMI Opens Application Interchange).

19. **Regarding dependent claims 4 and 6**, neither Robbins et al., IBM, nor Meltzer et al. explicitly teach **the DTD comprises an XMI DTD, modeling an IMS transaction definition in ... UML, and processing the UML object model using ... XMI**. However, Iyengar et al. do teach that *the system also transforms legacy business processes, including legacy applications into UML format* (Abstract, lines 4 – 6). It would have been obvious to one with ordinary skill in the art to interpret the disclosure as providing for **the DTD comprises an XMI DTD, modeling an IMS transaction definition in ... UML, and processing the UML object model using ... XMI**, since

Brodsky teaches that *once the type of information needed to be exchanged is expressed in UML, XMI will automatically create the DTD and transfer format* (page 7, lines 9 – 10). Further, it would have been obvious to one with ordinary skill in the art to combine the inventions of Robbins et al., IBM, and Meltzer et al. with that of Iyengar et al. because such a combination would allow the users of the combined invention of Robbins et al. and Meltzer et al. the benefit of *a means of transforming a distinctive representation of business model information into a generalized representation* (Column 2, lines 31 – 33).

20. **Regarding dependent claim 11**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.

21. **Regarding dependent claim 13**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

22. **Regarding dependent claim 18**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.

23. **Regarding dependent claim 20**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

24. Claim 5, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins et al. (US006532463B1), IBM (Research Disclosure 423111) and Meltzer et al. (US006125391A) as applied to claims 1 – 3, 7, 8 – 10, 14, 15 – 17, and 21 above, and further in view of Leaf (US005754772A).

25. **Regarding dependent claim 5**, neither Robbins et al., IBM nor Meltzer et al. explicitly teach **receiving the document at an IMS gateway**. Leaf teaches that *an on-line transaction processing system is made accessible to Web Browsers by establishing a predetermined plurality of transaction gateway clients to receive HTTP requests that are received by a Web Server from the Web Browsers* (Column 2, lines 30 – 35), which provide for **receiving the document at an IMS gateway**. It would have been obvious to one with ordinary skill in the art to combine the inventions of Robbins et al. and Meltzer et al. with that of Leaf because such a combination would allow the users of the combined invention of Robbins et al., IBM, and Meltzer et al. the benefit of *a flexible and efficient means for allowing interoperability between business application software and the World Wide Web* (Column 2, lines 12 – 15).

26. **Regarding dependent claim 12**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

27. **Regarding dependent claim 19**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (703) 305-4502. The examiner can normally be reached on M - F, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JOSEPH H. FEILD
PRIMARY EXAMINER

NH